IX. *An Account of the* Hermaphrodite Lobſter *preſented to the* Royal Society *on* Thurſday May *the 7th, by Mr.* Fiſher *of* Newgate-Market, *examined and diſſected, purſuant to an Order of the Society. By* F. Nicholls, *M. D. Præl. Anat. Oxon. F. R. S.*

THE World has frequently been amuſed with Appearances proper to both the Sexes, in Perſons who have from thence termed themſelves *Hermaphrodites:* But ſuch of them as have paſſed a more ſtrict Examination, have proved, that thoſe Appearances were either morbid Caſes, or præternatural Formations of the Parts proper only to one Sex. Thus an elongated *Clitoris* has paſſed for a *Penis*, and *ſteatomatous* (or other) Tumors of the *labia pudendi* have been thought *Teſticles*, while the ſubjacent *Vagina* has been the only Proof of the Exiſtence of the Parts proper to both Sexes in the ſame Subject. So that at preſent the Exiſtence of præternatural Hermaphrodites ſeems univerſally denied. Nor is it eaſy to conceive, how an Hermaphrodite can be formed in a Species whereof each Sex has the Parts ſubſervient to Generation, ſingle and neceſſarily ſituated in the ſame Parts of the Body; at leaſt without either a very remarkable Mal-formation of the Body in general, or ſo perverted a Situation of thoſe Parts, as muſt very much impair their Uſes.

But in thoſe Animals whoſe Parts of Generation are double and independant on each other, as the Lobſter, Crab, and many Birds, the Parts proper to both Sexes may poſſibly be formed in the ſame Subject without Prejudice to their Uſes: But in that Caſe the ſeveral Parts can be but ſingle; and conſequently, the Subject

ſo formed cannot be termed perfect as to its Species, in regard to either Sex, though it may be perfectly of both Sexes ſo far as regards Generation.

Under this Idea of an *Hermaphrodite*, I may venture to ſay, the Lobſter referred to my Examination is truly one; and, if ſplit from Head to Tail, is Female on the right Side, and Male on the left Side.

In Order to illuſtrate this, I ſhall give a ſhort Account of the Structure of the male and female Lobſter, ſo far as relates to the Difference between the two Sexes, and then proceed to ſhew in what Manner they were combined in the Subject before you.

It has already been obſerved that the Lobſter, both male and female, has all the Parts of Generation double, except that the female has one Paſſage only, through which it is probable the *Ova* are emitted out of the Trunk, in Order to be affixed to the ſmall Appendages under the Tail.

The *Penis* of the male Lobſter ariſes from the Teſticle, and is no more than a Continuation of the *Vas deferens*; it is reflected and retored once, after which it grows thicker, as to its Subſtance (probably forming a *corpus cavernoſum*) and terminates, not in the laſt Leg but one, as *Willis*, in his Treatiſe *de Animâ Brutorum* has obſerved, but at a ſmall perforated Tubercle in the firſt Bone of the laſt Leg. *See Fig. the 1ſt*, A A, *the two* Penes.

Between the two laſt Legs and the two Legs above them are two Proceſſes, which, from their reſembling the *Nymphæ* of Women, I ſhall term *Nymphæform* Proceſſes. Theſe Proceſſes are covered with Hair, and unite at their Baſes without leaving any Paſſage. *Fig. the 1ſt*, B B, *the two Nymphæform Proceſſes.*

Below the two laſt Legs, towards the Tail, are two Appendages, which, from their Similitude, I ſhall

term the *ſtyliform Appendages*. Theſe in the Male are thick, hard, and void of Hair. *Fig. the* 1*ſt*, C C, *the two ſtyliform Appendages.*

The Tail is continued from the Trunk in a gradual Decreaſe of its Dimenſion, and is covered by Plates, which extend themſelves but little below the Subſtance of the Tail, and terminate in acute Angles, without any Ways diverging. *Fig. the* 1*ſt*, D D, *the Terminations of the Plates.*

It is to be obſerved, that ſometimes theſe Plates are edged with ſhort and thin Hair, and ſometimes have no Hair.

The Female on the other Hand, in the Place of the Teſticle has an Ovary, which, like the Teſticle, extends itſelf from the Stomach to near one half of the Tail. From the Middle of the Ovary a Duct deſcends to the Legs, which opens at a round Hole edged with Hair in the firſt Bone of the laſt Leg but two: This is the *Uterus*. *Fig. the* 2*d*, A A, *the Entrance into the two* Vaginæ.

The two Proceſſes, which I have termed *Nymphæform*, in the Female make a more obtuſe Angle at the Union of their Baſes; are leſs hairy, and leave a Paſſage, through which it is probable the *Ova* are emitted, to be affixed to the Appendages under the Tail. *Fig. the* 2*d*, B B, *the two Nymphæform Proceſſes*; D, *the Paſſage for the* Ova.

The two ſtyliform Appendages in the Female are ſoft, thin, and edged with long Hair. *Fig. the* 2*d*, C C, *the two ſtyliform Appendages.*

The Plates covering the Tail are extended much farther under the Tail than in the Males, beſide which they diverge, in order to leave a greater Space for containing the *Ova*; for the better Defence of which they terminate broad, and are edged with thick and long Hair. *Fig. the* 2*d*, F F, *the Terminations of the Plates covering the Tail.*

In

In the *Hermaphrodite Lobſter* I found all theſe Parts proper to both Sexes regularly diſpoſed, but in ſuch Manner that the Parts proper to the Female were to be found only on the right Side, and the Parts proper to the Male only on the left Side.

In the antepenultimate Leg the *os uteri* was very obvious on the right Side, as in the Females, but had not the leaſt Mark of any ſuch Paſſage in the ſame Leg on the left Side. *Fig. the* 3*d*, A, *the* os uteri *only on the right Side.*

The *Nymphæform Proceſs* on the right Side made an obtuſe Angle at its Inſertion into the Body, and was ſoft and perforated as in the Females, while the correſponding Proceſs made a leſs Angle, was more hairy and rigid at its Baſis, as in the Male. *Fig. the* 3*d*, B, *the right Nymphæform Proceſs*; C, *the left Proceſs.*

The *ſtyliform Proceſs* on the right Side was ſoft, flat, and edged with Hair, as in the Female; but on the left Side it was ſtiff, hard, and void of Hair. *Fig. the* 3*d*, D, *the right ſtyliform Proceſs as in the Female*; E, *the left ſtyliform Proceſs, as in the Male.*

In the laſt Leg on the left Side the perforated Tubercle for the Paſſage of the *Penis* (as in the Male) was very conſpicuous, but without the leaſt Appearance of ſuch Tubercle in the correſponding Leg on the right Side. *Fig the* 3*d*, (H) *the perforated Tubercle for the Paſſage of the* Penis.

The Plates covering the Tail were extended on the right Side conſiderably below the Subſtance of the Tail, and were edged with thick and long Hair, and terminated broad, as in Females. *Fig. the* 3*d*, F, *the Termination of the Plates covering the Tail.*

On the left Side, theſe Plates were much leſs extended below the Tail; were almoſt totally void of Hair, and terminated in acute Angles. *Fig. the* 3*d*, (G)

the

the Termination of the Plates covering the Tail on the left Side.

Theſe Plates diverged likewiſe on the right Side, as in the Females, but not on the left Side, as in the Males. *Fig. the 4th*, A, *the diverging of the Plates on the right Side*; B, *the Plates no Ways diverging.*

Upon removing Part of the great Shell, I found the internal Parts of Generation in both Sexes exactly correſponding to thoſe externally deſcribed.

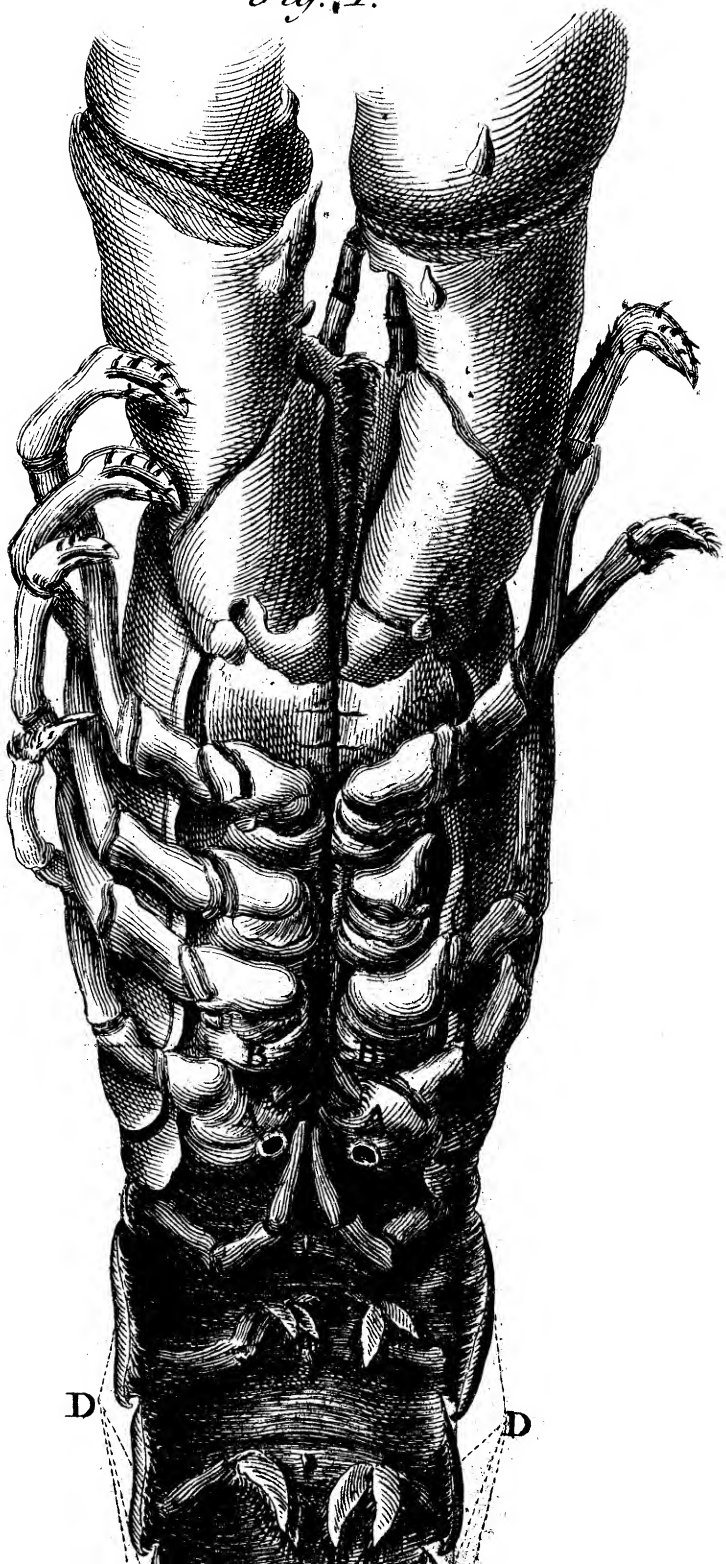
In the right Side adjacent to the Heart, the *Oviduct* was regularly diſpoſed, it was full of *Ova*, and ſent off its *Oviduct* or *Uterus*, to the antepenultimate Leg. *Fig. the 4th*, F, *the* Ovary; G, *the* Oviduct *or* Uterus *leading to the antepenultimate Leg.*

In the left Side the Teſticle was rightly diſpoſed as to its Form, Subſtance, and Situation; Part of which I was obliged to remove, in Order to ſhew the *Penis*, which terminated as in all Males, at the Tubercle in the firſt Joint of the laſt Leg. *Fig. the 4th*, E, *the* Penis; I, *Part of the Teſticle unremoved.*

I had ſome Thoughts of removing ſo much of the great Shell as was neceſſary to ſhew the Courſe and Terminations of the *Uterus* and *Penis*, at their proper Orifices. But conſidering that by that Means the Tail would too eaſily ſeparate from the Trunk, and the Appearances of the other Marks be rendered leſs obvious; I choſe only to lay them open at the Back, believing that to be ſufficiently ſatisfactory to thoſe who underſtand the Structure of that Animal. I have ſteeped it in three different Spirits, and carefully diſpoſed it in a Glaſs, which I have ſtopped in the beſt Manner I can, that it may remain in the Repoſitory, as an undeniable Proof of ſo remarkable a Fact.

F I N I S.

Fig. 1.



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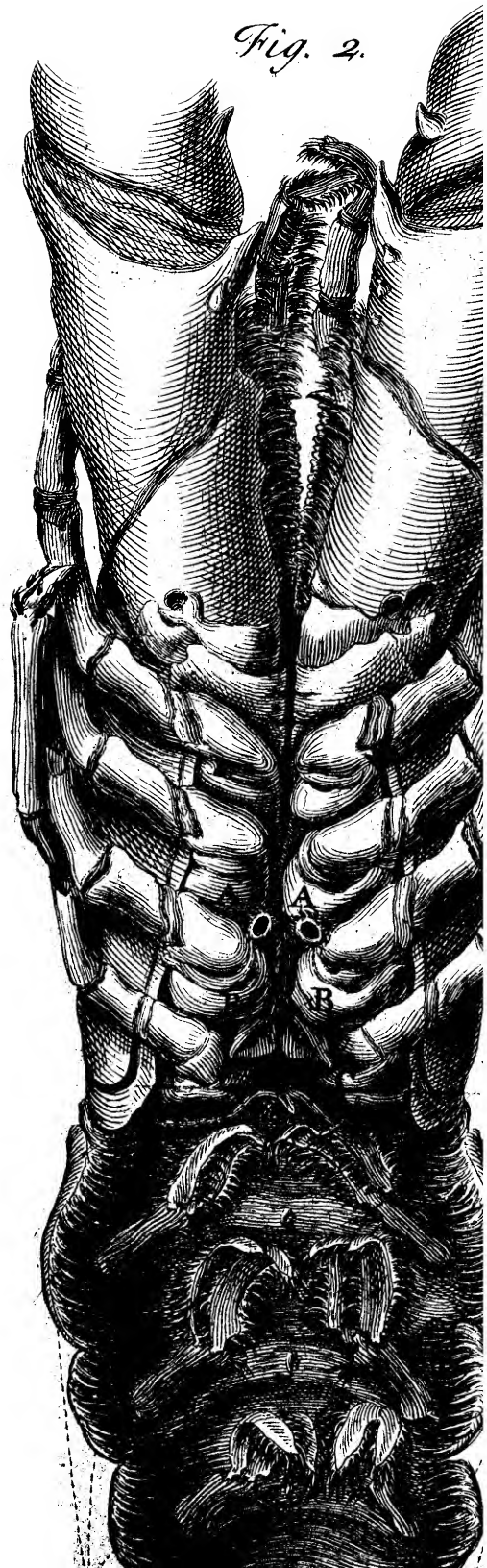

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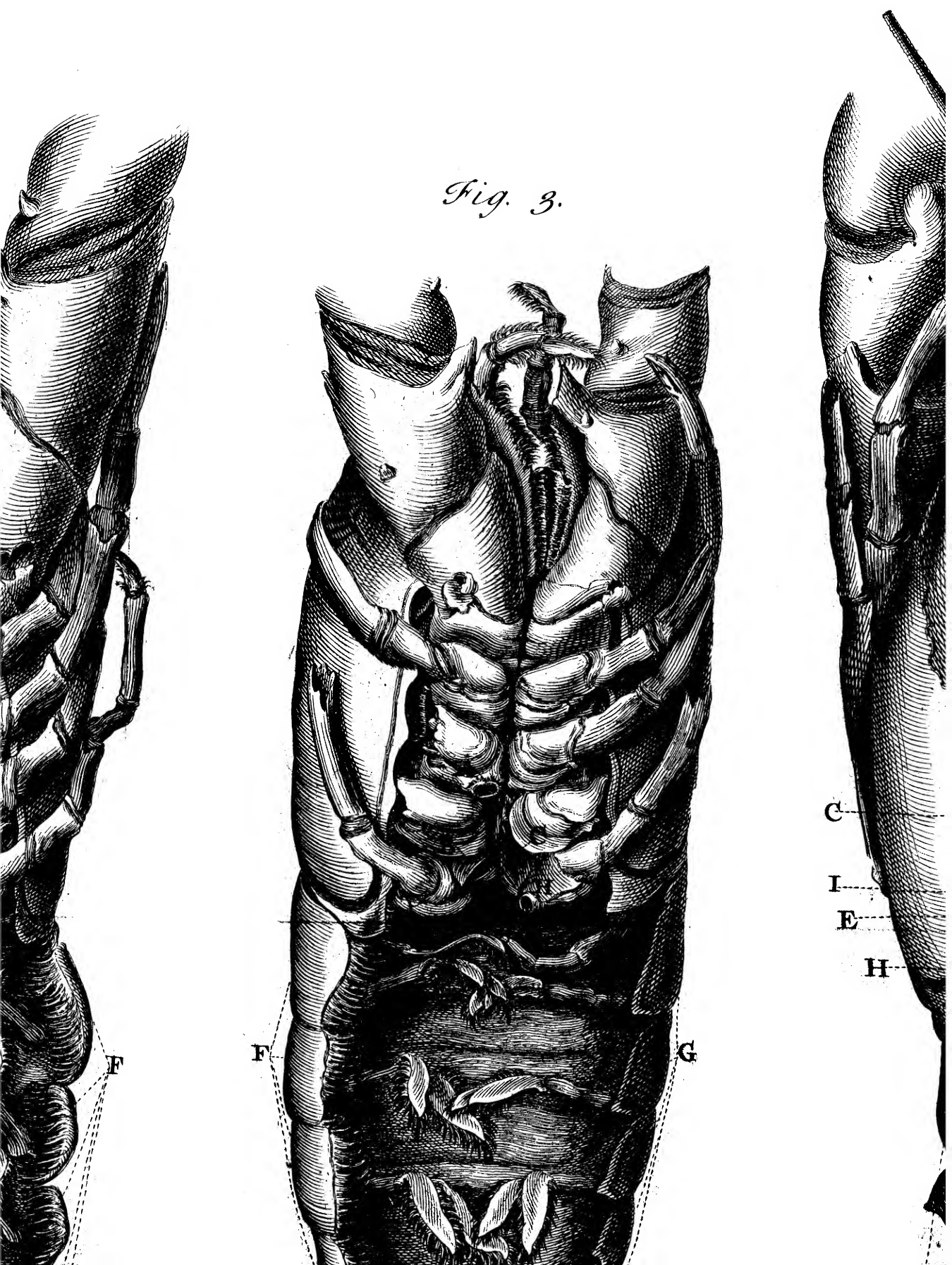

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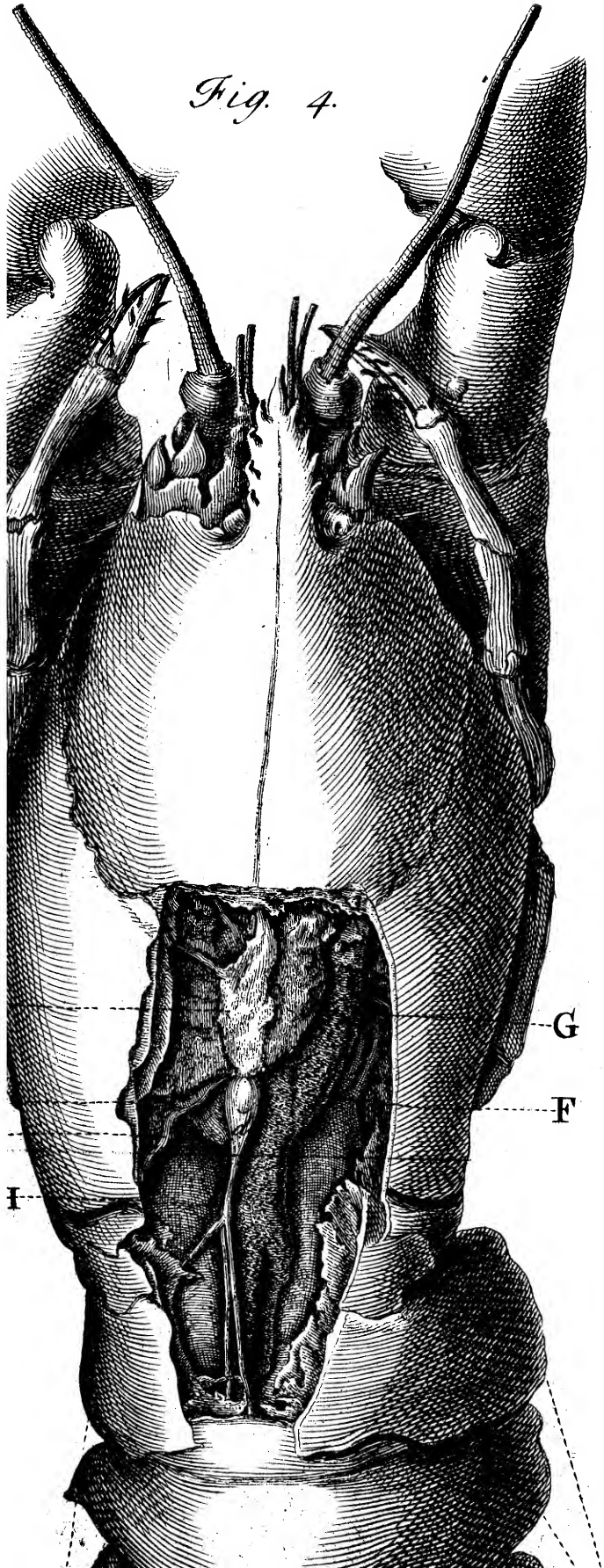

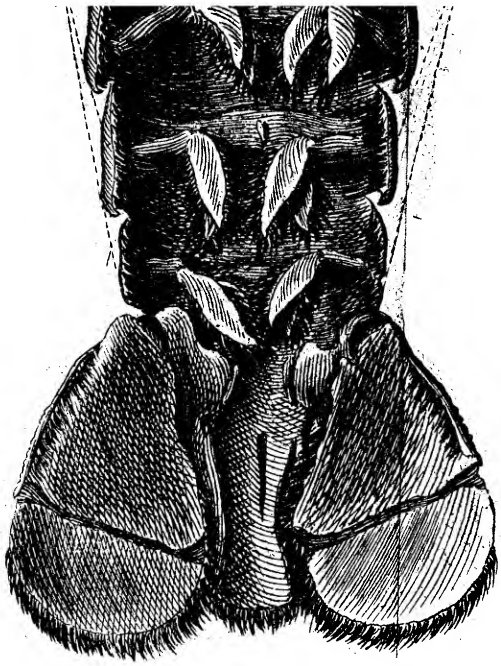

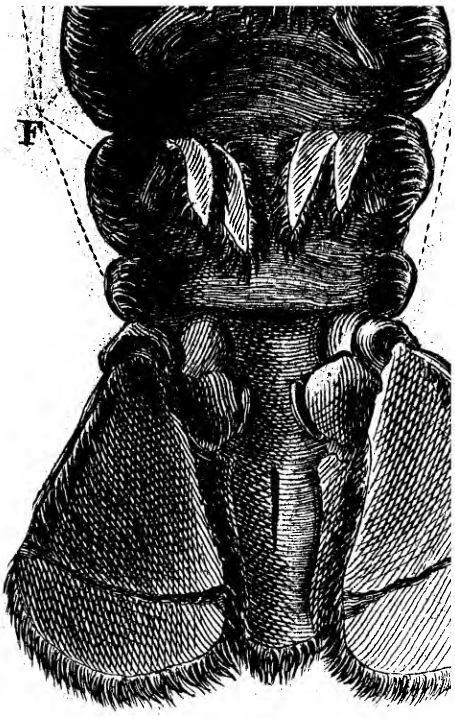
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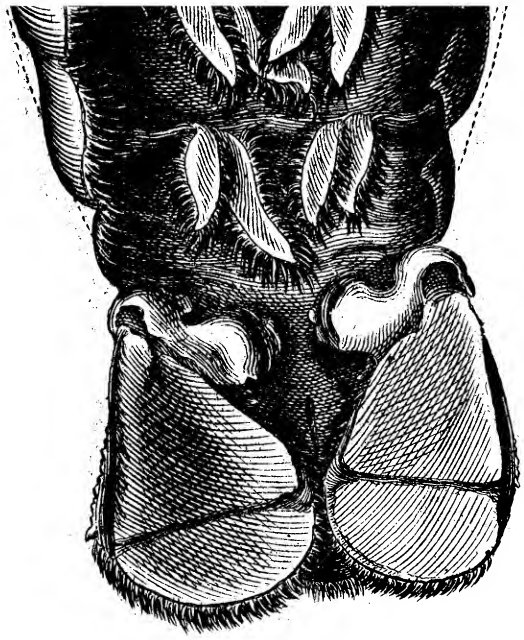

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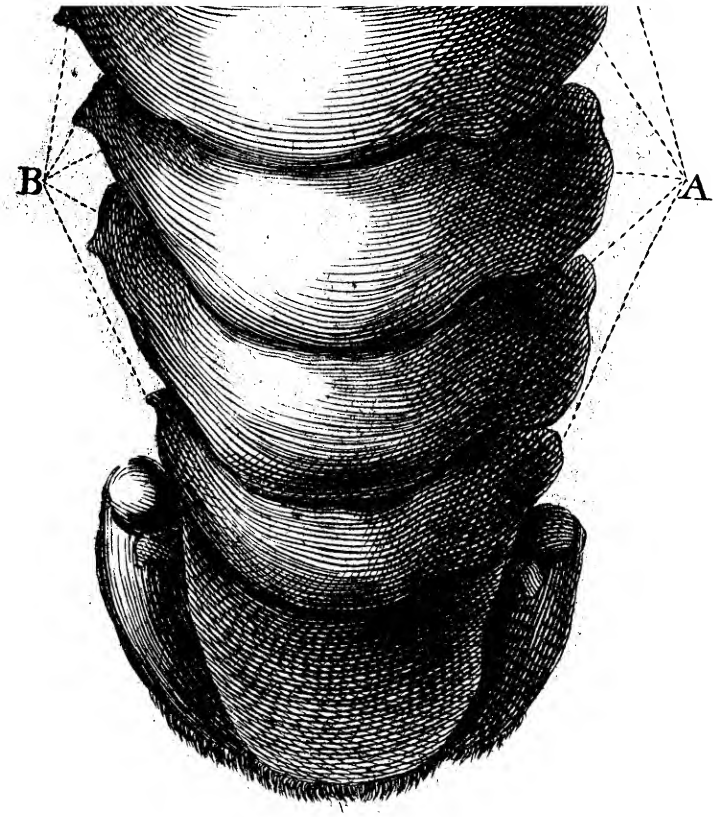
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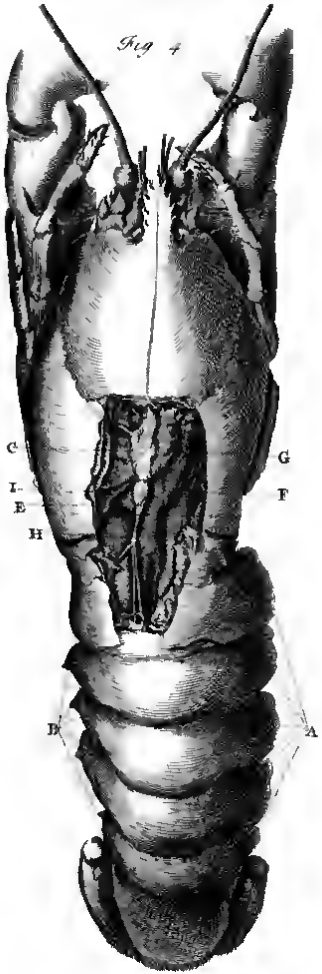
Fig 4